

SOME NEW AND INTERESTING BUTTERFLY (LEPIDOPTERA) DISTRIBUTION AND TEMPORAL RECORDS FROM QUEENSLAND AND NORTHERN AUSTRALIA

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Abstract

Taractrocer *anisomorpha* (Lower, 1911), *Papilio fuscus canopus* Westwood, 1842 and *Hypolimn* *missipus* (Linnaeus, 1764) are newly recorded from the Kimberley region, northern Western Australia; *Danaus genutia alexis* (Waterhouse & Lyell, 1914) is newly recorded from Darwin, Northern Territory; *Catopsila pyranthe crokera* (W.S. Macleay, 1826) and *Hypolimn* *alimena lamina* (Linnaeus, 1758) are newly recorded from Cape York Peninsula, Queensland; *Parnara bada sida* (Waterhouse, 1934) and *Pelopidas agna dingo* (Moore, 1866) are newly recorded from Blackdown Tableland, central-eastern Queensland. Nine new temporal records filling gaps in the current adult butterfly phenology from Australia are also provided for *Rachelia extrusa* (C. & R. Felder, 1867), *Papilio aegeus aegeus* Donovan, 1805, *Elodina parthia* (Hewitson, 1853), *Leptosia nina* (Fabricius, 1793), *Libythea geoffroy genia* Waterhouse, 1938, *Danaus genutia alexis* (Waterhouse & Lyell, 1914), *Nesolycaena caesia* d'Apice & Miller, 1992, *Jamides amaraug* Druce, 1891 and *Pithecop* *s dionisius dionisius* (Boisduval, 1832).

Introduction

Since 1996, the authors have undertaken numerous field trips across northern Australia, from the Kimberley region of northern WA to Cape York Peninsula, Qld (including the islands of the Torres Strait) and the Blackdown Tableland of central-eastern Qld. The data presented below are based on detailed observations made during these field trips and compared with the locality distribution and temporal records principally contained in Braby (2000) and papers by subsequent authors. These data are aimed at filling current gaps in published butterfly spatial distribution and temporal records.

Eight new significant spatial distribution records are presented in Table 1 for *Taractrocer* *anisomorpha* (Lower, 1911), *Papilio fuscus canopus* Westwood, 1842 and *Hypolimn* *missipus* (Linnaeus, 1764) from the Kimberly region, northern WA; *Danaus genutia alexis* (Waterhouse & Lyell, 1914) from Darwin, NT; *Catopsila pyranthe crokera* (W.S. Macleay, 1826) and *Hypolimn* *alimena lamina* (Linnaeus, 1758) from Cape York Peninsula, Qld; *Parnara bada sida* (Waterhouse, 1934) and *Pelopidas agna dingo* (Moore, 1866) from Blackdown Tableland in central-eastern Qld.

Nine new temporal records that fill gaps in current adult butterfly phenology data in Australia are presented in Table 2 for *Rachelia extrusa* (C. & R. Felder, 1867), *Papilio aegeus aegeus* Donovan, 1805, *Elodina parthia* (Hewitson, 1853), *Leptosia nina* (Fabricius, 1793), *Libythea geoffroy genia* Waterhouse, 1938, *Danaus genutia alexis* (Waterhouse & Lyell, 1914), *Nesolycaena caesia* d'Apice & Miller, 1992, *Jamides amaraug* Druce, 1891 and *Pithecop* *s dionisius dionisius* (Boisduval, 1832).

Table 1. New butterfly distribution records from northern Western Australia (WA), the Northern Territory (NT) and northern and central-eastern Queensland (Qld).

Family / Species	Comments
HESPERIIDAE	
<i>Taractrocera anisomorpha</i> (Lower, 1911)	Not previously recorded north of the Gibb River Road, Kimberley region, northern WA. Williams <i>et al.</i> (2006) recorded it from the Great Northern Highway, 115 km south-east of Derby (17°50'S, 124°32'E), the Junction of the Great Northern Highway and Gibb River Road (15°50'S, 128°18'E) and eastwards to 2 km north of the Ord Dam (16°05'S, 128°45'E), in late March to early April 2003. We collected a single female from Ooraro Hill near Kalumburu (14°17'17.77"S, 126°40'3.42"E) on 1 April 1996. A single male was also collected adjacent to monsoon forest (vine-thicket) on the Mitchell Plateau (Site 2: 14°37'23.4"S, 125°48'30.64"E) on 1 November 2009.
<i>Parnara bada sida</i> (Waterhouse, 1934)	Not previously recorded from Blackdown Tableland, in central-eastern Qld. We collected two males, one during 19-22 September 2008 and the other on 24 September 2010, hill-topping on a ridge top north of Horseshoe Lookout on the Blackdown Tableland, 183 km west of Rockhampton. Both were newly emerged, suggesting that they had not travelled far and were likely to be resident in the area.
<i>Pelopidas agna dingo</i> (Moore, 1866)	Not previously recorded from Blackdown Tableland, in central-eastern Qld. We collected a single female feeding at <i>Leptospermum</i> sp. blossom on 29 September 2012 along the track to Two Mile Falls south of Horseshoe Lookout, Blackdown Tableland.
PAPILIONIDAE	
<i>Papilio fuscus canopus</i> Westwood, 1842	Not previously recorded from Kalumburu or the Mitchell Plateau, Kimberley region, northern WA. Grund and Hunt (2001) noted that the butterfly had been observed sporadically in the Kimberley by Grund during a previous trip in 1997, yet no mention of it was made in Grund (1998). Williams <i>et al.</i> (2006) recorded a specimen from Rocky Cove, Vansittart Bay (14°13'S, 126°52'E) collected in March 2004. We commonly encountered both sexes at Kalumburu and along the banks of creeks crossing the Kalumburu Road up to 15 km south of the Kalumburu township, during our initial visit to the area 28 March to 4 April 1996 and again during 24-27 March 2009.

Family / Species	Comments
	The butterfly was also commonly encountered in monsoon forest areas of the Mitchell Plateau in early November 2009.
PIERIDAE	
<i>Catopsila pyranthe crokera</i> (W.S. Macleay, 1826)	Not previously recorded from Cape York Peninsula, Qld. In early June 2006, the authors and Dr C.G. Miller encountered both sexes commonly at Bamaga, Lockerbie Scrub, Roma Flats, Pajinka and Somerset in northern Cape York Peninsula, extending the northern limit for the butterfly on mainland Australia from Kuranda to the tip of Cape York Peninsula.
NYMPHALIDAE	
<i>Danaus genutia alexis</i> (Waterhouse & Lyell, 1914)	Not previously recorded from Darwin, NT. Braby (2000) recorded it from the Darwin district. A single male was collected by one of us (SSB) at East Point coastal reserve, Darwin on 10 February 2007.
<i>Hypolimnas missipus</i> (Linnaeus, 1764)	Not previously recorded from Kalumburu, Kimberley region, northern WA. We collected a single female flying in a grassy area adjacent to the Kalumburu Mission on 24 March 2009.
<i>Hypolimnas alimena lamina</i> (Linnaeus, 1758)	Not previously recorded from the White Mountains, Cape York Peninsula, Qld. Atkins <i>et al.</i> (2003) noted an unconfirmed sighting of a female in one of the gorges of White Mountains National Park. We observed two males flying in the gorges north-east of the Old Warang Homestead, White Mountains National Park north-west of Torrens Creek, Qld during our visit to the area 8-10 November 2011.

Table 2. New butterfly temporal records.

Family / Species	Comments
HESPERIIDAE	
<i>Rachelia extrusa</i> (C. & R. Felder, 1867)	Not previously recorded in March or April. We observed numerous adults flying high on the canopy between 0700 and 0800h at the second crossing on Gordon Creek in the Iron Range Resources Area, Cape York Peninsula, Qld during the period 11-18 March 2011 and again in April 2012.
PAPILIONIDAE	
<i>Papilio aegaeus aegaeus</i> Donovan, 1805	Not previously recorded from the White Mountains, Cape York Peninsula, Qld in November. Atkins <i>et al.</i> (2003) recorded it from there during the study period 20 March to 19 April 2000 or during one of the many

Family / Species	Comments
	<p>other visits that the authors made to the area in prior years during the months of January to May, September, October or December, although it is not clear in which month(s) the butterfly was recorded. We observed two males flying in the gorges north-east of the Old Warang Homestead, White Mountains National Park north-west of Torrens Creek, Qld during our visit to the area 8-10 November 2011.</p>
PIERIDAE	<p>Not previously recorded from the White Mountains in November. Atkins <i>et al.</i> (2003) recorded it there from records taken by S.J. Johnson and P.S. Valentine during visits made to the area in prior years during the months of January to April (including the study period) and December. We collected and observed it flying in the gorges north-east of the Old Warang Homestead, White Mountains National Park during our visit to the area 8-10 November 2011.</p>
<i>Elodina parthia</i> (Hewitson, 1853)	
<i>Leptosia nina</i> (Fabricius, 1793)	<p>Not previously recorded in July or November. On 1 November 2009, we collected five males from monsoon forest on the Mitchell Plateau, Kimberley region, northern WA (Site 2: 14°37'23.4"S, 125°48'30.64"E). Frank Pierce has photographic records of the butterfly taken during bird trips to the region in July 2007 (Site 1: 14°36'56"S, 125°47'53"E) and from the same site during another visit in June 2010.</p>
NYMPHALIDAE	<p>Not previously recorded in April. We encountered both sexes feeding at blossom of a Fiddlewood tree (<i>Citharexylum</i> sp.) growing in the Kalumburu Mission's campground, Kimberley region, northern WA during our initial visit to the area 28 March to 4 April 1996. Adults were also encountered very commonly roosting in trees along the creeks crossing the Kalumburu Road up to 15 km south of the Kalumburu township, where the larval food plant <i>Celtis philippensis</i> Blanco, 1837 (Ulmaceae) grows.</p>
<i>Libythea geoffroy genia</i> Waterhouse, 1938	
<i>Danaus gemutia alexis</i> (Waterhouse & Lyell, 1914)	<p>Not previously recorded in February, March or November. A single male was collected by one of us (SSB) at East Point coastal reserve, Darwin, NT on 10 February 2007. In November 2009, all stages of the butterfly were observed, with adults commonly encountered flying in areas adjacent to the bulrushes growing around the verges of Lake Kununurra, WA.</p>

Family / Species	Comments
	In early April 1995, all stages of the butterfly were observed and collected at Ivanhoe Crossing near Kununurra, the original location where the life history was discovered (Meyer 1995), indicating that adults would also be encountered in March at this locality.
LYCAENIDAE	
<i>Nesolycaena caesia</i> d'Apice & Miller, 1992	Not previously recorded in March or November. During our visit to the Kalumburu area from 28 March to 4 April 1996, adults were very commonly encountered flying on the sandstone outcrops adjacent to Ooraro Hill near the Kalumburu township (14°17'17.77"S, 126°40'3.42"E). Larvae were located on the larval food plant, later identified as <i>Boronia wilsonii</i> (F.Muell. ex Benth.) Duretto (Rutaceae) in 1996 and reared to adult. Adults were also observed and collected during a subsequent visit 24-27 March 2009 and again on 3 November 2009. All immature stages were located on the same food plant in November 2009 and reared to adult.
<i>Jamides amarauge</i> Druce, 1891	Not previously recorded in January, March or May. We observed and collected both sexes from Green Hill, Thursday Island, Qld on 25 March 2000; Murray Island, eastern Torres Strait, Qld from 27 March to 4 April 2000; and Dauan Island, northern Torres Strait, Qld from 26 April to 2 May 2002 and again during 7-14 January 2011.
<i>Pithecops dionisius dionisius</i> (Boisduval, 1832)	Not previously recorded in March. We collected seven males from three sites in the Iron Range area, Cape York Peninsula, Qld, with Dr C.G. Miller during our visit to the area 11-18 March 2011.

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